# REQUEST FOR APPROVAL OF LOCAL PROGRAMS IMPLEMENTING THE FALLS STORMWATER RULE AND DELEGATION OF FURTHER APPROVAL AUTHORITY TO THE DIRECTOR

REPORT TO THE NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

January 12, 2012

Note: Local stormwater program documents summarized here can be viewed or downloaded from the DWQ web page at <a href="http://portal.ncdenr.org/web/wq/ps/nps/fallslake">http://portal.ncdenr.org/web/wq/ps/nps/fallslake</a>. (See the links under "Local Government Stormwater Programs")

#### **Summary & Recommendation**

The Falls Lake stormwater rule, 15A NCAC 2B .0277, requires fourteen local governments to prepare, adopt, and implement programs to address the issue of nutrient control within their respective jurisdictions. In March 2011, the EMC approved a model local program developed by staff and stakeholders. Communities submitted proposed local programs for DWQ staff review in August 2011, and have made revisions based on staff comments. Staff requests that the Committee approve these fourteen local programs as meeting the minimum requirements established in section (3) and (4) of the rule.

1. Approval of two programs would be contingent upon receiving a final copy of each local governments updated Unified Development Ordinance containing revisions to fully incorporate the Falls new development stormwater requirements.

#### **Rule History**

In 2005 the NC General Assembly passed SL 2005-190 (S981), which included a requirement for the Commission to adopt a nutrient strategy for Falls Lake designed to address excess nutrient inputs to Falls Lake that can lead to algae blooms and other water quality problems. The 2009 regular session produced Senate Bill1020, a bill devoted to water quality improvements in Falls Lake. This bill revised the EMC adoption deadline to January 15, 2011. Beginning in 2008 at the Commission's direction, DWQ staff conducted an extensive stakeholder process to receive public input on the development of a nutrient management strategy for the Falls Lake. The draft rules were approved by the EMC in March 2010 and went out to public hearing and comment in June and July 2010. Hearing Officers deliberated the public comments between August and October 2010 and recommended further revisions to the rules. In November 2010, the Commission adopted the final Falls Lake rules for wastewater, agriculture, and new and existing development stormwater. The rules were subsequently approved by the Rules Review Commission in December 2010 with an effective date of January 15, 2011.

#### **Rule Requirements**

The Falls Lake new development stormwater rule (15A NCAC .02B .0277) requires all local governments in the Falls watershed – six counties and eight municipalities – to implement local stormwater programs for new development activities. The Rule requires all fourteen local governments to establish permitting programs that require all residential new development activities disturbing one-half acre or more and all commercial new development projects disturbing 12,000 square feet or more to meet the following requirements:

- Post-construction runoff meet nitrogen & phosphorus rate targets
  - o 2.2 lbs/ac/yr Total Nitrogen
  - o .33 lbs/ac/yr Total Phosphorus
- Proposals that exceed these performance standards may partially offset their load increases after first meeting onsite treatment criteria.
  - o 30% of overall reduction need onsite for projects less than one acre
  - o 50% of overall reduction need onsite for projects greater than one acre
  - o 30% of overall reduction need onsite for any downtown redevelopment project
- At minimum, post-development peak flows leaving the site may not exceed predevelopment for the 1-year, 24-hour storm event.
- Stormwater systems shall be designed to control and treat at a minimum the runoff generated from all surfaces in the project area by one inch of rainfall.
- Proposed new development shall demonstrate compliance with the riparian buffer protection requirements of 15A NCAC 02B .0233 and .0242 (Existing Neuse Buffer Rule).

#### **Falls Lake Watershed Local Governments**

The following local governments are subject to the Falls Lake New Development Stormwater Rule (15A NCAC 2B .0277).

<b>Municipalities</b>	<b>Counties</b>
Butner	Durham
Creedmoor	Franklin
Durham	Granville
Hillsborough	Orange
Raleigh	Person
Roxboro	Wake
Stem	
Wake Forest	

For these local governments only that part of their jurisdiction that falls within the Falls Lake watershed is subject to the rule. For subject counties, applicable areas are those under the direct jurisdiction of the county, which excludes incorporated municipalities. Applicable areas for a

county can also include the extraterritorial jurisdiction (ETJ) of a municipality within the county that has also been designated for rule application, to the geographic extent that the municipality does not itself implement a particular rule element. Municipalities and counties are also authorized by statute to establish joint programs or to delegate their programs as permitted by statutes regulating such interlocal agreements.

#### **Implementation Timeline**

Implementation of the Falls Lake New Development rule is unique in that it requires local governments to develop their local programs, receive EMC approval of these programs, and begin implementation of the stormwater requirements within eighteen months of the effective date of the rule. This is a much shorter timeline than what was provided under similar management strategies in the in the Neuse and Tar-Pamlico basins and the Jordan watershed. As a result of this shortened timeframe, staff met with local government stakeholders to receive input on the development of a model stormwater program the same month the rule went into effect. The Division then submitted the Falls Lake model program to the EMC in March 2011 for approval. Local governments then had just five months to submit programs for Division review and EMC approval. Contingent upon their approval at the January EMC meeting local governments are required to fully adopt and begin implementing their Falls Lake stormwater programs by July 2012, a mere eighteen months after effective date of the rule. Annual reports are required beginning in August 2013.

#### **New Development Rule Implementation Timeline Summary**

January 15, 2011: Effective date of the stormwater rule.

March 10, 2011: EMC approves model local program.

August 10, 2011: Deadline for submittal of draft local programs to DWQ.

January 12, 2012: EMC hears request to approve local programs.

July 12, 2012: Local governments adopt and implement programs.

August, 2013: Local governments begin submitting annual reports to DWQ.

**Differences between the Falls Lake and Neuse New Development Stormwater Rules**Significant differences between the Falls Lake and Neuse stormwater rules are as follows:

- □ *Phosphorus:* The Falls Lake rule imposes a phosphorus control requirement for new development that does not exist in the Neuse, which stems directly from differences between the nutrient reduction goals for the estuary and lake.
- □ Land Disturbance Thresholds: The land disturbance thresholds for the Falls Lake rule is one-half acre (residential) and 12,000 sq/ft (commercial). These are smaller land disturbance thresholds than those under the Neuse stormwater rule which are one acre (residential) and one-half acre (commercial). The difference in land disturbance thresholds is a direct result of the larger reduction needed under Falls Lake nutrient management strategy.

- Onsite Treatment Requirement: As with the land disturbance threshold, the Falls rule has more stringent onsite reduction criteria that must first be met before a developer participate in an offsite nutrient offset project to partially offset their load increases. The Falls onsite treatment criteria are not based on flat lb/ac/yr rates like in the Neuse. They are instead based on achieving a certain % reduction of the overall reduction need onsite before going offsite. Again this is a result of the greater reduction need under the Falls rules and in recognition of limited opportunity for offsite reduction making it necessary to achieve a larger portion of the overall reduction onsite before going with and offsite option.
- □ Calculation Tool: In 2010 DWQ contracted with NC State to update the current stormwater accounting tool which had been previously based on using BMP % reduction efficiencies that are now considered to be based upon somewhat dated research, needed to be updated. Based on more the availability of more current research information staff at NCSU have developed and updated stormwater loading tool based upon different evaluation metrics: effluent concentration and runoff volumetric reduction which better represents what BMPs are accomplishing in the field. This new tool is what will be used for implementing the Falls Lake new development rule.

#### **Local Program Development Process**

To assist the local governments in implementing the rule requirements DWQ to submitted a model local stormwater program to the EMC in March 2011 for approval. The model program provided guidance to local governments and developers on interpreting and applying rule requirements. The model program included model local ordinance developed by the UNC School of Government in addition to an updated stormwater nutrient loading accounting tool developed by NC State that will allow developers to account for nutrient loading from development and loading changes due to implementing Best Management Practices. In developing the model programs staff worked in consultation with affected local governments and other concerned stakeholders. Once the model program was approved by the EMC in March 2011, local governments had five months to submit their local new development stormwater programs. A summary of the local program submittal requirements is included in Appendix A.

Four of the fourteen local governments enlisted the help of consultants to develop their local programs and have indicated they will likely continue to use consultants to a certain degree with the implementation of the requirements. Five local governments have contracted the services of a consulting firm to study the feasibility of creating a multijurisdictional stormwater utility. The local governments indicated that they anticipate that once formed, the utility will hire or contract with a professional engineer with stormwater experience to aid in the implementation of their stormwater programs.

All fourteen Falls local governments submitted proposed programs for DWQ staff review in August 2011 and have made revisions based on staff comments. Two local governments (Oxford and Hillsborough) are still in the process of revising their Unified Development Ordinances to fully incorporate the Falls stormwater requirements. Since the program submittals subsequent follow up from these two local governments indicate they do plan to fully incorporate the Falls requirements into their UDOs and given the short amount of time local government had to go through a UDO revisions process staff feel it appropriate to recommend conditional approval of these two programs. Final approval would be contingent upon receiving a final copy of each

local governments updated Unified Development Ordinance containing revisions to fully incorporate the Falls new development stormwater requirements.

The local government program documents are numerous and quite large, they are not attached to this report. Instead, full documentation for each local government can be accessed at on the EMC website or the DWQ Falls Lake <a href="http://portal.ncdenr.org/web/wq/ps/nps/fallslake">http://portal.ncdenr.org/web/wq/ps/nps/fallslake</a>.

#### Looking Ahead

Starting in August 2013 Local governments are required to report annually on implementation of their programs, including loading changes from new development permitting and compliance. Staff will monitor these reports and continue to work with local governments to refine their programs.

#### **Staff Recommendation**

Staff respectfully requests that the Commission approve the fourteen Falls Lake local government new development stormwater programs as meeting the minimum requirements established in (3) and (4) of the rule, with the following qualification:

1. Approval of two programs would be contingent upon receiving a final copy of each local governments updated Unified Development Ordinance containing revisions to fully incorporate the Falls new development stormwater requirements.

Staff also request that the Commission delegate authority to the Director to grant final approval to any programs on which the Commission places contingencies, upon resolution of those contingencies, and to approve any subsequent program amendments that these communities may propose.

# **APPENDIX A**

SUMMARY OF LOCAL PROGRAM SUBMITTAL REQUIREMENTS

The model program DWQ provided to local governments in March 2011 identified the following set of elements local governments were to include in their local program submittal:

# I. Local Program Information for EMC Approval (Required)

Local programs were required to provide the following minimum information in their local program submittal for Commission approval:

- **Proposed adoption timeline and effective date** Timeline requirements for the submittal, review, and adoption and implementation of local programs.
- Other Stormwater Programs The rule requires adherence to certain other state stormwater regulations. Programs identify existing stormwater regulations within the jurisdiction, including water supply watershed, whether designated under Phase II NPDES and status of Phase II implementation.
- Statement of Riparian Buffer Ordinance Compliance One aspect of development application review required by the rule is ensuring protection of riparian buffers and state whether, and if so, where they include that process description in their ordinance.
- State and Federal Entities Implementation State whether the program will enforce the requirements of this rule on state and federal entities that do not have a Phase II NPDES stormwater permit.
- **Area of Applicability** Include description of planning jurisdiction, responsibility for program in ETJ, any inter-jurisdictional agreement, and if applicable, extent of implementation of rule requirements outside Falls Watershed.
- Minimum Qualifications of Stormwater Administrator State the minimum qualifications of the personnel who will be responsible for implementing the program, including stormwater plan review and BMP inspection.
- **Maintenance/Inspection Program** Describe intent regarding a program for ensuring maintenance of BMPs called for in the rule.
- Forms in Administrative Manual Provide a listing of forms to be used in the permitting and compliance process.
- **Ordinance** Provide all sections of ordinance that will be necessary to implement the rule. This should include all subject areas covered by the model ordinance.
- Nutrient Loading Accounting Tool Provide a statement that the local government plans to use the Jordan / Falls nutrient load accounting tool or describe the method that will be used for accounting for nutrient loading and BMP implementation to meet rule requirements. In the latter case, please provide: documentation on that tool; an electronic version of the tool; a discussion of how it differs from the Jordan / Falls tool; and how it will be at least as protective as the Jordan/Falls tool.
- Equivalent Program Option- Item (6) of the Falls New Development Rule provides local governments the option of requesting the Division accept the local government's implementation of another stormwater program or programs as satisfying one or more of the requirements on Items (3) and (4) of the rule. The Division shall provide a determination on the acceptability of any such alternative prior to requesting Commission approval of local programs. Should a local government propose alternative requirements to achieve and maintain the rate targets described in the Rule, it shall include in its

program submittal technical information demonstrating the adequacy of those requirements.

# II. Appendix of Supporting Information (Required)

Local governments were requested to include an appendix in their program submittal that contains detailed supporting information that may be updated periodically. Future revisions to this information will not require Commission or Division Director approval. The supporting information appendix for each program includes the following information:

- **Program Contacts and Professional Qualifications** Names and contact information for the Stormwater Administrator and other personnel responsible for reviewing stormwater designs and performing and reviewing inspections.
- **Stormwater Map** The most current map of jurisdictional boundaries at a scale or resolution useful for implementation purposes, and be one that the local government will be prepared to update periodically as needed and report on in annual reports.
- **Forms** Provide a copy of all forms that you will use to carry out permitting and compliance

# **II. Supplemental Information (Optional)**

Local governments are asked to provide the following supplemental information to aid the Division's review of your programs:

- **Program Approval** Describe your local approval process and the status of your program's approval prior to submittal to the Division. Include a description of approval steps following Commission approval leading to implementation.
- Ordinance Changes Provide a listing of ordinance sections created or revised to address the rule's requirements. If a local government finds a subject covered by the model ordinance unnecessary, provide a statement identifying the model ordinance section(s) and any supporting discussion to support your position.
- Land use planning State whether you have conducted a review of local ordinances to identify potential modifications that would 1) reflect improved growth management practices 2) allow developers adequate flexibility to utilize planning measures to reduce impervious surfaces and 3) reduce untreated nutrient loading rates from developments as discussed in Chapter 2-E Land Use Planning. If such a review has been conducted, please provide a summary of your findings and any actions taken.
- **Appeals Process** (optional) Summarize the appeals processes that are described in your ordinance.
- Exceeding Minimum Requirements (optional) Identify significant aspects of your proposed local program that go beyond the minimum requirements established in the rule, potentially including any of the following:
  - New Development Definition
  - Disturbance thresholds
  - Loading rate targets
  - o Off-site thresholds

- o If your jurisdiction is partly outside the Falls watershed, whether you propose to apply the rule jurisdiction-wide
- Redevelopment require treatment on redevelopment that does not increase built-upon area?
- **Permitting Process** (optional) Provide an outline and fact sheet describing the steps of the local permitting process for developers and engineers subject to the program requirements.